





"Own the Edge"

# COLD WEATHER INJURY PREVENTION





# "Own the Edge" PREVENTION

All too often we focus on recognizing and treating cold weather injuries. However, the more important issue is prevention. Consequently, leaders should be trained on the following precautions and supervisory responsibilities to prevent cold injuries:





#### "Own the Edge" PREVENTION

(Continued)

- Enforce the buddy system
- Check each soldier for proper dress (gloves; loose, layered clothing).
- Ensure proper hygiene is practiced.
- Never allow a soldier to unnecessarily wear wet clothing.
- Change socks regularly
- Identify and closely monitor personnel who have previously suffered a cold-weather injury (more susceptible).
- Remind soldiers that alcohol consumption increases the risk of cold injuries.





# SIGNS SYMPTOMS AND FIRST-AID

 When prevention fails it is critical that everyone be able to recognize and treat cold-weather injuries.



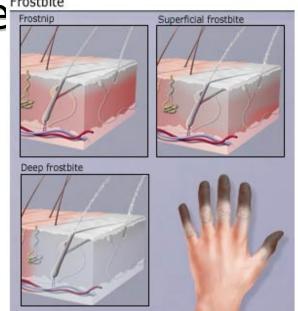


## FROSTBITE

 Frostbite is caused by freezing of tissue, normally due to exposure below 32 degrees Fahrenheit.

Seek treatment eve Frostbile





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## "Own the Edge" SYMPTOMS

Loss of sensation in affected area; tingling, blistered, swollen, or tender areas; pale, yellowish, waxylooking skin.





#### "Own the Edge" FIRST-AID

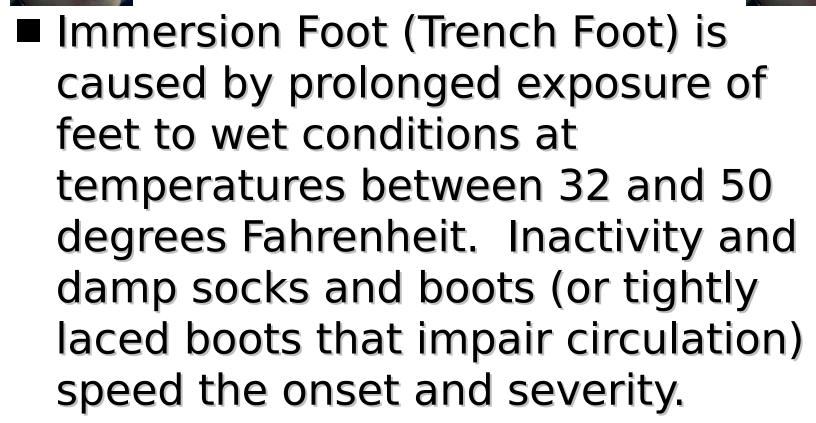
- Warm the affected area with direct body heat.
- Do not massage or rub the area, get it wet, use ice or snow, or expose the affected area to fire, or other source of intense heat.
- Evacuate to medical facility.







# "Own the Edge" IMMERSION FOOT (TRENCH FOOT)







#### "Own the Edge"

#### **SYMPTOMS**

- Cold feet, which may become numb; feet may later feel hot with shooting pain. There may also be swelling, redness, and bleeding.
- Walking becomes challenging





#### "Own the Edge" FIRST AID

- Re-warm feet by exposing them to warm air, evacuate victim for medical attention.
- Do not massage, rub, moisten, or expose affected area to intense heat.





## "Own the Edge" DEHYDRATION

 Dehydration, which is the depletion of body fluids, is just as common in cold weather as it is in hot.





# "Own the Edge" SYMPTOMS

 Nausea, dizziness, weakness, headaches, and blurred vision.





#### "Own the Edge" FIRST AID

Always drink plenty of fluids, especially during and after extended physical activity.





# "Own the Edge" HYPOTHERMIA

 Hypothermia is a lifethreatening situation caused by prolonged cold exposure and body-heat loss. This may occur at temperatures well above freezing, especially when a person is immersed in water.





## "Own the Edge" SYMPTOMS

 Shivering stops, drowsiness, mental slowness, loss of coordination, unconsciousness, irregular heartbeat.





#### Examples of wind Chilithe Fedgeright and down from

- •with a temperature of -15°F and winds blowing at 35 mph, the wind chill index would be -74°F and would cause exposed skin to freeze in 30 seconds
- •with the temperature of 15°F and winds blowing at 35 mph, the wind chill index would be -27°F, which would likely cause frostbite

Read Fight and down from the calm-air line. For example, a temperature of 0°F combined with a 20 mph wind, has an expersent cooling effect.

	45	400	35	30	9	<u>O</u> 2	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40
4mph	45	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40
5mph	43	37	32	27	22	16	11	6	0	-5	-10	-15	-21	-26	-31	-36	-42	-47
10mph	34	28	22	16	10	3	-3	-9	-15	-22	-27	-34	-40	-46	-52	-58	-64	-71
15mph	29	23	16	9	2	-5	-11	-18	-25	-31	-38	-45	-51	-58	-65	-72	-78	-85
20mph	26	19	12	4	ગ	-10	-17	-24	-31	-39	-46	-53	-60	-67	-74	-81	-88	-95
25mph	23	16	8	1	-7	-15	-22	-29	-36	-44	-51	-59	-66	-74	-81	-88	<del>,9</del> 6	-103
30mph	21	13	6	-2	-10	-18	-25	-33	-41	-49	-56	-64	-71	-79	-86	-93	-101	-109
35mph	20	12	4	-4	-12	-20	-27	-35	-43	-52	-58	-67	-74	-82	-89	-97	-105	-113
40mph	19	11	3	-5	-13	-21	-29	-37	-45	-53	-60	-69	-76	-84	-92	-100	-107	-115
45mph	18	10	2	ф	-14	-22	-30	-38	-45	-54	-62	-70	-78	-85	-93	-102	-109	-117

Unpleasant

Frostbite likely. Outdoor activity dangerous.

Exposed flesh will freeze within half a minute for the average person.





#### "Own the Edge" FIRST-AID

 Strip off wet clothing, wrap victim in blankets or put in sleeping bag, get victim to heated location, evacuate to medical facility.





# CARBON MONOXIDE

 Carbon Monoxide is a poisonous gas that is most commonly generated by exhaust fumes from vehicles or other internal combustion engines.





# "Own the Edge" SYMPTOMS

 Headache, weakness, dizziness, blurred vision, nausea, vomiting, unconsciousness.





#### "Own the Edge" FIRST-AID

 Move affected person to fresh air, summon medical assistance, administer artificial respiration if required.





C.O.L.D Weather Injury Prevention Clean clothes Over-heating Loosen clothing Dry clothes





# COLD WEATHER SAFETY IS NO JOKE!

It's worth mentioning again...

 When prevention fails, it is critical that everyone is able to recognize and treat cold weather injuries. and treat cold-weather injuries..





"Own the Edge"

#### Winter Recreation Safety





# *"Own the Edge"*Winter Recreation Safety

- Warm up and Stretch
- Receive training before attempting a new sport
- Dress appropriately for the activity
- Never venture out on your own.
- If you venture out on your own file a flight plan.





"Own the Edge"

#### ROAD CONDITION STANDARDS





#### "Own the Edge" ROAD CONDITION STANDARDS

GREEN: Unrestricted vehicle dispatches are authorized. Ideal road, visibility, and temperature conditions exist. Drivers will observe normal precautions and speed limits.





#### "Own the Edge" ROAD CONDITION STANDARDS

AMBER: Ideal road, temperature, and visibility conditions do not exist. If a road condition marked with an asterisk in the amber category is reported, commanders will declare amber road conditions. Increased driving times, hazardous road conditions, and driver experience will be considered in dispatching vehicles under amber conditions. Commanders and ASG/AST directorate heads or primary staff will authorize dispatches under amber conditions.





"Own the Edge" RED: Only mission essential vehicle dispatches are authorized. Road, temperature, and visibility conditions are equal to or worse than those noted Road-Condition Status Characteristics. If one or more of the conditions marked with an asterisk in the red category are reported, commanders must declare road conditions red. The dispatch record for mission essential vehicles will be marked "missionessential." Battalion level commanders, including ASG commanders, will authorize dispatch of mission essential vehicles. AST commanders will authorize dispatch of mission essential vehicles to operate within the local AST area.





#### "Own the Edge"

BLACK: Only emergency-essential vehicle dispatches are authorized. Road, temperature, and visibility conditions are equal to or worse than those noted in Road-Condition Status Characteristics. If one or more of the conditions marked with an asterisk in the black category are reported, commanders must declare road conditions black. The dispatch record for emergency vehicles (police, fire, ambulance, and emergency engineer) will be marked "emergency-essential." Chiefs of appropriate offices (provost marshal, fire, medical activity, and directorate of public works) and brigade level commanders, including ASG commanders, and above will authorize dispatch of emergency vehicles.

Note: Drivers of military vehicles transitioning through ASGs, that have declared black road conditions, should consult with their chain of command and re-evaluate the risk of continuing the mission. Weather and road conditions will be part of all mission risk management decisions.





#### "Own the Edge" ROAD CONDITION STANDARDS

Road Condition	Road Surface	Snow	Ice	Snow	Visibility Depth	Temperature
Green	Dry	(1) None (2) Blowing Powder	None	None	More than 50 meters	Above 35F (+2C)
Amber	Wet	*Packed *Slush	*Patches *Black ice *Slush	than 4	*Between 20 and 50 meters	30F (-1C) to 35F (+2C)
Red	*Flooded	*Drifting	*Shee	et ice	*>4" *<20	) m <30F (-1C)
Black	*Heavily Flooding	*Heavy Drifting	*Extreme Shee	*>8" t Ice	*<15 m	<10F (-12C)

<sup>\*</sup>When one or more of the road conditions marked with an asterisk are noted, the corresponding road condition status must be declared.







- Cold weather greatly affects the operating performance of your equipment.
- Winter weather presents unique hazards, i.e., snow, slush, ice, black ice, etc...
- Drivers must always exercise extreme caution for safe winter driving.
- INCREASE INTERVALS!
- SLOW DOWN!
- KNOW YOUR VEHICLE!





"Own the Edge"

#### DO YOU GET TIRED WHILE DRIVING ON LONG TRIPS?





#### WAKE Up Gwethe Edge"

before you find yourself buried under them!

Sleepy drivers should *not* count on any last-second warning signs or on their ability to fight sleep! If you feel that sleep is somewhat likely within the next few minutes, should pull over as soon as possible.

48% of fatal driver error causes are by young drivers, late at night, 50% of which are due to fatigue/fall seleep.

You can use physiological indicators such as:

yawning

eyes straining, closing, or wanting to close

head nodding

hallucinogenic or wandering thoughts









If you are feeling drowsy at the wheel, please pull over as soon as possible! Take a nap, or call for a ride.



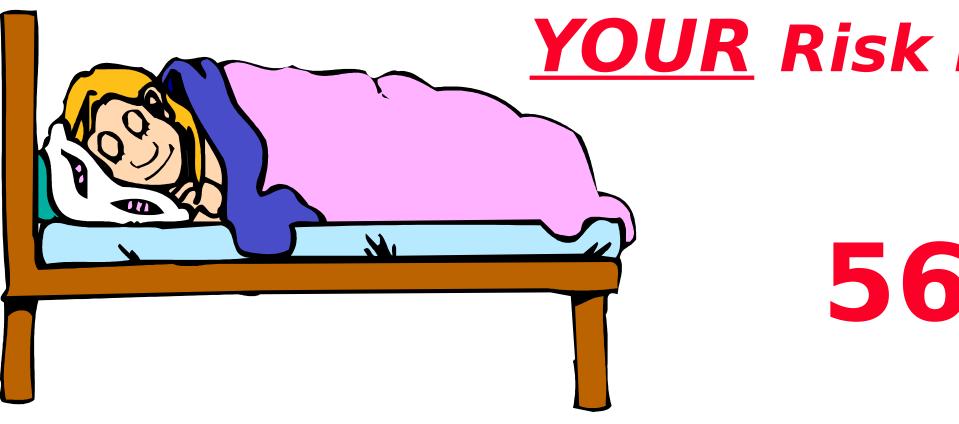
Don't take chances! Don't try to sleep and drive!





"Own the Edge"

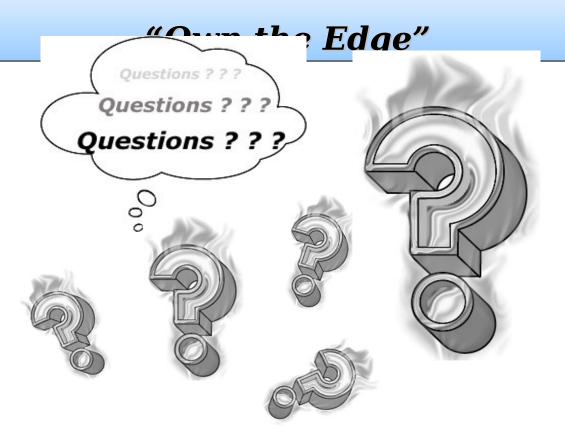
#### **FATIGUE: Increases**











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